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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,308	06/27/2001	Keith A. Crutcher	874000001COE	2346

27572 7590 06/27/2003

HARNESS, DICKEY & PIERCE, P.L.C.
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BLOOMFIELD HILLS, MI 48303

EXAMINER

KIM, VICKIE Y

ART UNIT	PAPER NUMBER
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1614

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,308

Applicant(s)

CRUTCHER ET AL.

Examiner

Vickie Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,17 and 35-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2,17 and 35-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Election acknowledged

Applicants' affirmation on the election without traverse of Group I, claims 2,17,35-39 and heparan sulfate as an elected species is acknowledged. Since the election is made without the traverse, the restriction requirement deems proper and made FINAL.

Status of application

The claims 2,17 and 35-39 are pending. Since all the pending claims read on species elected, the claims 2,17 and 35-39 are presented for the examination.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2, 17, 35-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Ban et al(US 4,956,347).

The instant claims are directed to a method of treating a condition(e.g. Alzheimer type senile dementia or arteriosclerosis) associated with toxicity caused by a peptide fragment of apolipoprotein E(MW \geq at least 5kD) using an effective amount of heparan sulfate to affected cells of the said condition via preventing toxicity to said cells.

Ban et al teach a treatment of Alzheimer-type senile dementia using a therapeutically effective amount of heparan sulfate like substance, see column 4m lines 25-50. It further states that sulfonucopolysaccharide(e.g. heparan sulfate like

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substance) is conventional therapeutic modality for arteriosclerosis, see column 3, lines 1-10. One would have envisaged that heparan sulfate like substance would have included heparan sulfate and any substance having heparan sulfate moiety. Thus, all the critical elements required by the claims are well taught cited reference.

As to claims 2,17, 35-37, Ban et al's teaching inherently possesses the feature(i.e. preventing toxicity caused by a peptide fragment(141-147) of apolipoprotein E(MW \geq at least 5kD)) recited in the said claims. Since the said feature is considered to be an underlying mechanism for said treatment wherein it is naturally achieved when heparan sulfate is administered to the affected cell to treat Alzheimer-type senile dementia or arteriosclerosis. The said feature does not have patentably weight in this case and is not considered to be a patentably distinct subject matter over the teaching of the prior art of the record.

Thus, all the claimed subject matter is anticipated by the cited reference and the claims are properly included in this rejection.

Conclusion

3. No claim is allowed.

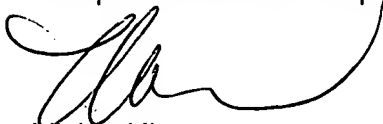
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickie Kim whose telephone number is 703-305-1675. The examiner can normally be reached on Tuesday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marianne Seidel can be reached on 703-308-4725. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-3165 for regular communications

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and 703-746-3165 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

A handwritten signature in black ink, appearing to read 'Vickie Kim', with a long, sweeping horizontal stroke extending to the right.

Vickie Kim,
Patent examiner
June 20, 2003
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